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REMARKSSupport for Claim Amendments

Claims 1 and 15 have been amended to include the limitation that "the haze-prevention layer contacts the substrate and the reflective metal layer." Support for this amendment may be found, at least, in method claim 18, as well as in the working examples of paragraphs [0058] and [0059], where articles were prepared by applying a haze-prevention layer directly to a substrate, and subsequently applying a reflective metal layer directly to the haze-prevention layer.

Response to Restriction Requirement

Restriction was required to one of the following inventions: Group I, corresponding to claims 1-15, drawn to a data storage medium; and Group II, claim 16, drawn to a method. 11/15/04 Office Action, page 2, paragraph no. 1. Applicants affirm their provisional election, with traverse, of Group I, claims 1-15. Applicants recognize that restriction practice seeks to avoid multiple searches. However, MPEP 803 provides that if the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to independent or distinct inventions. It is respectfully submitted that the examination of all the claims in this application will not place an undue burden on the PTO. Specifically, electronic search capabilities at the Examiner's disposal would allow the Examiner to include compositional and property limitations in a search of class 427, subclass 162, thereby minimizing the number of references to be considered from that class and subclass, which is relevant to withdrawn claim 16.

Accordingly, it is respectfully requested that the requirement for restriction be reconsidered and withdrawn.

Provisional Obviousness-Type Double Patenting

Claims 1-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of copending

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Application No. 10/638,100. 11/15/04 Office Action, pages 3-4, paragraph no. 2. Pursuant to 37 CFR § 1.130(b), Applicants are submitting herewith a terminal disclaimer in compliance with 37 CFR § 1.321(c) to overcome the rejection.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claim 14 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. 11/15/04 Office Action, page 4, paragraph no. 3. In particular, the Office Action states that, “[i]t is unclear which surface of the reflective article has a reflectivity of at least 80%. It is also unclear if the surface reflects at least 80% of the specific light or any incoming light.”

First, one of ordinary skill in the art would recognize that it is the surface of the required “reflective metal layer” that exhibits a reflectivity of at least 80%. The name of this layer is sufficient to draw this conclusion, but even if it were not, Applicants’ explanation of the origin of their invention in paragraph [0007] would confirm this understanding. Specifically, Applicants improved the reflection from a reflective metal layer by adding a haze-prevention layer between the thermoplastic substrate and the reflective metal layer. In both the prior art and the present invention, the important reflection is that of the reflective metal layer in the direction opposite to that of the substrate. Furthermore, Applicants’ specification in claim 13 of ASTM D523 (titled “Standard Test Method for Specular Gloss”) as a standard procedure for measuring reflectivity makes clear to those of ordinary skill in the art that reflectivity is measured relative to a specific specular source. Applicants therefore respectfully assert that claim 13 is not indefinite. Accordingly, Applicants respectfully request the reconsideration and withdrawal of the rejection of claim 13 under 35 U.S.C. § 112, second paragraph.

Claim Rejection Under 35 U.S.C. § 102(b) over Smith

Claims 1, 2, and 4-15 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent No. 4,638,335 to Smith et al. (“Smith”). 11/15/04 Office Action, pages 4-5, paragraph no. 4. Applicants respectfully traverse this rejection.

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Smith generally describes a multi-layer optical recording member comprising in sequential order a structural substrate, a thermally degradable polymer layer, a light absorbing recording layer, a thermally degradable polymer dielectric layer, and a reflective layer. Smith abstract. Smith therefore requires one layer interposed between the substrate and the light absorbing recording layer (which the Examiner analogizes to Applicants' haze-prevention layer) and another layer interposed between the light absorbing recording layer and the reflective layer.

Smith does not anticipate Applicants' independent claims 1 and 15 because Smith does not teach the requirement in each of those claims that "the haze-prevention layer contacts the substrate and the reflective metal layer." To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766, 1767 (Fed. Cir. 1987). Applicants' independent claims 1 and 15 have been currently amended to require that "the haze-prevention layer contacts the substrate and the reflective metal layer." Smith does not teach this limitation because Smith requires one layer interposed between the substrate and the light absorbing recording layer (which the Examiner analogizes to Applicants' haze-prevention layer) and another layer interposed between the light absorbing recording layer and the reflective layer. In other words, Smith prohibits the light absorbing recording layer from contacting either the substrate or the reflective layer. Smith thus fails to teach all elements of claims 1 and 15, and Smith therefore cannot anticipate claims 1 and 15. Since claims 2 and 4-14 depend ultimately from and further limit claim 1, Applicants respectfully request the reconsideration and withdrawal of the rejection of claims 1, 2, and 4-15 under 35 U.S.C. § 102(b) over Smith.

Claim Rejection Under 35 U.S.C. § 102(e) over Nee

Claims 1, 2, and 4-14 stand rejected under 35 U.S.C. § 102(e), as allegedly anticipated by U.S. Patent Application Publication No. 2002/0034603 A1 to Nee ("Nee"). 11/15/04 Office Action, pages 5-7, paragraph no. 5. Applicants respectfully traverse this rejection.

Nee generally describes a silver-based alloy thin film for the highly reflective or

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semi-reflective coating layer of optical discs. Nee abstract. Alloy additions to silver include zinc, aluminum, zinc plus aluminum, manganese, germanium, and copper plus manganese. *Id.* In each of Nee's optical medium structures having a first reflective layer and a second reflective layer, at least one other layer is interposed between the first reflective layer and the second reflective layer. See, e.g., Nee Figures 3 and 4.

Nee does not anticipate Applicants' independent claims 1 and 15 because Nee does not teach the requirement in each of those claims that "the haze-prevention layer contacts the substrate and the reflective metal layer." Applicants' independent claims 1 and 15 have been currently amended to require that "the haze-prevention layer contacts the substrate and the reflective metal layer." Nee does not teach this limitation because Nee's structures that include a highly reflective layer and a partially reflective thin film layer (which the Examiner analogizes to Applicants' haze-prevention layer) require at least one other layer to be interposed between highly reflective layer and a partially reflective thin film layer. In other words, Nee prohibits the highly reflective layer from contacting the partially reflective thin film layer. Nee thus fails to teach all elements of claims 1 and 15, and Nee therefore cannot anticipate claims 1 and 15. Since claims 2 and 4-14 depend ultimately from and further limit claim 1, Applicants respectfully request the reconsideration and withdrawal of the rejection of claims 1, 2, and 4-15 under 35 U.S.C. § 102(b) over Nee.

Rejection of Claim 3 Under 35 U.S.C. § 103(a) Over Smith In View of Narayan

Claim 3 stands rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Smith in view of U.S. Patent No. 4,937,691 to Narayan et al. ("Narayan"). 11/15/04 Office Action, pages 7-8, paragraph no. 6. Applicants respectfully traverse this rejection.

Smith is described above.

Narayan generally describes a drive for a recording disk, the drive including a drive motor and a head transport mounted on a chassis which has a coefficient of expansion equal to that of the disk to reduce tracking errors caused by differential expansion of the chassis and the disk due to environmental changes. Narayan abstract.

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The disk comprises a base plate that may preferably be formed from polyetherimide. Narayan, col. 2, ll. 18-26. Narayan's disks are magnetic disks. See, e.g., Narayan, col. 1, ll. 9-10.

Claim 3 is patentable over Smith in view of Narayan because those references do not teach the claim 3 limitation that "the haze-prevention layer contacts the substrate and the reflective metal layer." For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). As discussed above, Smith fails to teach the claim 1 limitation that "the haze-prevention layer contacts the substrate and the reflective metal layer." Claim 3 depends directly from claim 1 and therefore incorporates the same limitation. Narayan does not remedy the deficiency of Smith. In particular, Narayan's magnetic disk drive does not include any layers corresponding to Applicants' reflective metal layer and haze-prevention layer, let alone a haze-prevention layer in contact with both a substrate and a reflective metal layer. The combination of Smith and Narayan thus fails to teach all elements of claim 3, and Smith and Narayan therefore fail to support a prima facie case of obviousness against claim 3. Accordingly, Applicants respectfully request the reconsideration and withdrawal of the rejection of claim 3 under 35 U.S.C. § 103(a) over Smith and Narayan.

Rejection of Claims 1-15 Under 35 U.S.C. § 103(a) Over Nee In View of Narayan and Smith

Claims 1-15 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Nee in view of Narayan and Smith. 11/15/04 Office Action, pages 8-9, paragraph no. 7. Applicants respectfully traverse this rejection.

Expressly or via dependence, each of claims 1-15 now includes the limitation that "the haze-prevention layer contacts the substrate and the reflective metal layer." As discussed above, neither Nee nor Narayan teaches this limitation. In fact, Nee teaches away from this limitation. Nee and Narayan therefore fail to support a prima

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facie case of obviousness against claims 1-15. Accordingly, Applicants respectfully request the reconsideration and withdrawal of the rejection of claims 1-15 under 35 U.S.C. § 103(a) over Nee in view of Narayan.

New Claims

Claims 17 and 18 have been added to further claim the invention. Support for claim 17 may be found in paragraph [0045] of the application as filed. Support for claim 18 may be found in paragraph [0044] of the application as filed.

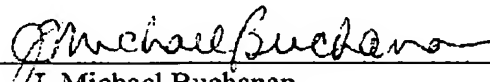
It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance is requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 07-0862 maintained by Assignee.

Respectfully submitted,

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